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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/828,751 | 04/21/2004 | Chuck Price | P00924-US-01 (06579.9374) | 5494 |

22446 7590 11/12/2009

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| EXAMINER | |
|---|---|
| NORTON, JENNIFER L | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2121 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 11/12/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/828,751 | PRICE ET AL. | |
| | Examiner | Art Unit | |
| | Jennifer L. Norton | 2121 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *23 July 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-6,9-14,16,18-20 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,9-14,16,18-20 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 August 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

**DETAILED ACTION**

1. The following is a **Non-Final Office Action** in response to the Request for Continued Examination filed on 23 July 2009. Claims 1, 4, 12 and 14 have been amended. Claims 15 and 17 have been cancelled. Claims 7, 8, 21-24 and 26-28 were previously cancelled. Claims 1-6, 9-14, 16, 18-20 and 25 are pending in this application.

***Response to Arguments***

2. Applicant's arguments, see Remarks pgs. 9-17, filed 23 July 2009 with respect to claims 1-6, 9-14, 16, 18-20 and 25 under 35 U.S.C. 103(a) have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,039,632 B2 (hereinafter McCormick) in view of U.S. Patent Publication No. 2003/0150909 A1 (Markham) in further view of U.S. Patent No. 6,178,362 B1 (hereinafter Woolard).

4. As per claim 20, McCormick teaches a method of allowing a user to access a plant management database and configure and manipulate the data stored therein, the method comprising:

providing at least one piece of manufacturing equipment capable of producing at least one product (col. 8, lines 29-32; i.e. a tissue machine to produce tissue paper);

collecting automatically a first product specific data (Fig. 3, element 306; i.e. product characteristics that is a measurable aspect or attribute of a product) from the at least one piece of manufacturing equipment (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21; i.e. collecting product data from the manufacturing processing operation at predetermined time intervals in MDR database (Fig. 3, element 108));

setting at least one range of specifications (col. 7, lines 17-19; i.e. a target value, a lower limit value and upper limit value of each characteristic);

indicating at least one range of alarms for the at least one product (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment cell illustrates a bold "X" when a product is not fit for release based on based on the evaluation of a measured value of product data compared to the specification limits of a user defined threshold);

the first product specific data is automatically collected and stored at regular time intervals (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21; i.e. collecting product

data from the manufacturing processing operation at predetermined time intervals in MDR database); and

notifying at least one user in real time when the first product specific data falls outside of the at least one range of specifications (col. 5, lines 53-63; i.e. the user station (Fig. 1A, element 106) notifies the user in real-time of the process performance via the screen shot of Fig. 6).

McCormick does not expressly teach entering manually second product specific data for the at least one product produced from the manufacturing equipment; setting at least one range of alarms for the at least one product; storing the first product data, the second product specific data, the at least one range of specifications, and the at least one range of alarms together in the same at least one database; and comparing the first product specific data with the second product specific data to the at least one range of alarms and/or the at least one range of specifications.

Markham teaches to entering manually second product specific data for the at least one product produced from the manufacturing equipment (pgs. 9, par. [0119]; i.e. the users input supplemental information with respect to an event); setting at least one range of alarms for at least one specific piece of data (pg. 5, par. [0058] and pg. 6, par. [0064]; i.e. setting an alert criteria); and storing the first product data, the second product specific data, the at least one range of specifications, and the at least one

range of alarms together in the same at least one database (pg. 20, par. [0201], pg. 26, par. [0244] and [0245] and Fig. 1, element 70).

Markham does not expressly teach comparing a first product specific data with a second product specific data to the at least one range of alarms.

Woolard teaches to comparing a first specific data with a second specific data to the at least alarm (col. 5, lines 53-62; i.e. analyzing data from different sites and comparing the sites to each other and alarming signaling).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick to include entering manually second product specific data for the at least one product produced from the manufacturing equipment; setting at least one range of alarms for at least one specific piece of data; and storing the first product data, the second product specific data, the at least one range of specifications, and the at least one range of alarms together in the same at least one database to improve quality and optimize productivity (Markham: pg. 1, par. [0003] and [0008]); and comparing a first specific data with a second specific data to the at least alarm to provide a navigator for visualizing each facility to analyze control problems and monitor alarms (Woolard: col. 2, lines 29-36).

5. As per claim 25, McCormick teaches as set forth above the step of generating at least one report based on the first product specific data and/or the second product specific data stored in the at least one database (col. 9, lines 26-44; i.e. generating report with information retrieved from the MDR database).

6. Claims 1-6, 9-14, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick in view of U.S. Patent No. 6,952,656 B1 (hereinafter Cordova) in further view of Markham.

7. As per claim 1, McCormick teaches a method of monitoring and controlling a manufacturing process, to enable at least one manufactured product to meet at least one specification, the method comprising the steps of:

providing at least one manufacturing process (col. 3, lines 41-46 and col. 4, lines 42-46 and Fig. 1, element 107; i.e. manufacturing processing operations ((MPO)s));

automatically collecting product specific data (Fig. 3, element 306; i.e. product characteristics that is a measurable aspect or attribute of a product) from the manufacturing process (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21; i.e. collecting product data from the manufacturing processing operation at predetermined time intervals in MDR database (Fig. 3, element 108)),

storing said product specific data (Fig. 3, element 306) in at least one database (col. 6, lines 63-67, col. 7, lines 1-3 and Fig. 3, element 108; i.e. storing product data in MDR database);

wherein the product specific data (Fig. 3, element 306) is automatically collected and stored at regular time intervals (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21; i.e. collecting product data from the manufacturing processing operation at predetermined time intervals in MDR database);

setting at least one specification (col. 7, lines 17-19; i.e. a target value, a lower limit value and upper limit value of each characteristic) for the at least one product (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment based on the evaluation of a measured value of product data compared to limits of a user defined threshold) and the at least one manufacturing process (col. 11, lines 12-27 and Fig. 6, element 604; i.e. the "At-Target" assessment based on the evaluation of measured values of process data compared to a target value);

accessing the at least one database (col. 3, lines 59-61, col. 4, lines 42-49 and col. 5, lines 19-26; i.e. data can be accessed on the MDR database via the Fig. 1, element 110);

indication of at least one alarm for the at least one product (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment cell illustrates a bold "X" when a product is not fit for release based on based on the evaluation of a measured value of product data compared to the specification limits of a user defined threshold)

and the at least one manufacturing sub-process (col. 11, lines 12-27 and Fig. 6, element 604; i.e. the "At-Target" assessment cell illustrates an arrow pointing left to indicate the process is running below target, and an arrow point to the right indicates the process is running above target based on the evaluation of measured values of process data compared to a target value); and

comparing the product specific data with the at least one specification (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment for a product provides a comparison of an estimate of the portion of the current production that falls outside of the limits to a user defined threshold) and notifying at least one user in real time when the product specific data triggers the at least one specification (col. 5, lines 53-63; i.e. the user station (Fig. 1A, element 106) notifies the user in real-time of the process performance via the screen shot of Fig. 6).

McCormick does not expressly teach to one manufacturing sub-process, collecting data through at least one data collecting apparatus.

Cordova teaches to at least one manufacturing sub-process (col. 2, lines 30-33, col. 3, lines 22-24, col. 18, lines 48-52 and Fig. 1 and 2; i.e. sub-process steps in semiconductor production) and collecting data through at least one data collecting apparatus (col. 8, lines 12-15 and Fig. 6, element 611; sensors are provided to sense and report process, product and equipment parameter data).

Cordova does not expressly teach to setting at least one alarm.

Markham teaches to setting at least one alarm (pg. 5, par. [0058] and pg. 6, par. [0064]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick to include at least one manufacturing sub-process and collecting data through at least one data collecting apparatus to provide improvement in data acquisition, process control, quality, yield and cost reduction in manufacturing systems (Cordova: col. 5, lines 30-34); and setting at least one alarm to improve statistical process control of machines and plants to improve quality and optimize productivity (Markham: pg. 1, par. [0003] and [0008]).

8. As per claim 2, McCormick teaches wherein the collecting and storing product specific data steps comprise automatically collecting (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21; i.e. collecting product data from the manufacturing processing operation at predetermined time intervals) and storing product specific data (Fig. 3, element 306; i.e. product characteristics) in the at least one database (col. 6, lines 63-67, col. 7, lines 1-3 and Fig. 3, element 108; i.e. storing product data in MDR database at predetermined time intervals).

McCormick does not expressly teach manually collecting and storing at least one piece of second product specific data in the same at least one database.

Cordova does not expressly teach manually collecting and storing at least one piece of second product specific data in the same at least one database.

Markham teaches to manually collecting (pgs. 9, par. [0119]; i.e. the users input supplemental information with respect to an event) and storing at least one piece of second product specific data in the same at least one database (pg. 8, par. [0096] and pg. 9, par. [0117]; i.e. the database can store different information with respect to one or more products, "For example, an incident of waste on a machine (e.g. the culling of one ore more products) by a waste code associated with a description field...").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick in view of Cordova to include manually collecting and storing at least one piece of second product specific data in the same at least one database to improve statistical process control of machines and plants to improve quality and optimize productivity (pg. 1, par. [0003] and [0008]).

9. As per claim 3, McCormick teaches to storing product data and process data in the same database (col. 6, lines 53-67 and col. 7, lines 1-3) and storing product identifying data and manufacturing plant specific data in databases (col. 7, lines 4-10 and col. 9, lines 55-67), but does not expressly teach the step of storing product

identifying data and manufacturing plant specific data together in the at least one database.

It would have been obvious to one having ordinary skill in the time the invetion was made to store product identifying data and manufacturing plant specific data together in the at least one database, since it has been held that forming in one piece an article which has been formerly formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

10. As per claim 4, McCormick teaches to allowing the user to select process information using a user station (col. 5, lines 4-26 and col. 9, lines 52-67), but does not expressly teach the step of allowing the user to select at least one manufacturing sub-process through at least one key process indicator the (KPI) dashboard.

Cordova does not expressly teach the step of allowing the user to select at least one manufacturing sub-process through at least one key process indicator the (KPI) dashboard.

Markham teaches the step of allowing the user to select at least one manufacturing sub-process (i.e. selecting information on a specific machine, a section, or sub-section of a machine) through at least one key process indicator the (KPI) dashboard (pg 4, par. [0049] and pgs. 26-27, par. [00251]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick in view of Cordova to include the step of allowing the user to select at least one manufacturing sub-process through at least one key process indicator the (KPI) dashboard to improve statistical process control of machines and plants to improve quality and optimize productivity (pg. 1, par. [0003] and [0008]).

11. As per claim 5, McCormick as set forth above teaches wherein the automatically collecting and storing the product specific data steps comprise collecting and storing at least one measure specific (col. 6, lines 61-67 and col. 7, lines 1-10; i.e. storing characteristics which are measurable aspects or attributes) to the at least one selected manufacturing sub-process (i.e. the family level of Fig. 5, element 500 which represents a group of characteristics such as product components and/or process section) that enables the manufactured product to meet the at least one specification (col. 9, lines 55-67 and col. 10, lines 19-42; i.e. each characteristic of Fig. 5, element 500 represents measurable aspect or attribute of a product and process property associated with a product component and/or process section having a stored specification (i.e. a target value, a lower limit value and upper limit value).

12. As per claim 6, McCormick teaches as set forth above the setting of the at least one specification step comprises setting at least one range of specifications for the at

least one measure (col. 7, lines 17-19; i.e. a lower limit value and upper limit value of measure for each characteristic) and the setting of the at least one alarm step comprises setting at least one range of alarms for the measure (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment cell illustrates a bold "X" when a product is not fit for release based on the evaluation of a measured value of product data compared to the specification limits of a user defined threshold).

13. As per claim 9, McCormick nor Cordova expressly teach the step of entering into the at least one database a reason for the collected measure falling outside of the at least one range of alarms and/or specifications.

Markham teaches to the step of entering into the database a reason for one collected measure generating an event (pg. 8, par. [0093] and [0102] and pg. 9, par. [0119]; i.e. a user input is entered to explain an event).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick in view of Cordova to include the step of entering into the database a reason for one collected measure generating an event to improve statistical process control of machines and plants to improve quality and optimize productivity (pg. 1, par. [0003] and [0008]).

14. As per claim 10, McCormick nor Cordova expressly teach the step of entering a corrective action into the at least one database, which was taken to prevent the at least one measure from falling outside of the at least one range of alarms and/or specifications.

Markham teaches to entering the step of entering a corrective action into the database, which was taken to prevent generating an event (pg. 8, par. [0093] and [0102] and pg. 9, par. [0119]; i.e. a user input is entered to identify planned corrective action).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick in view of Cordova to include entering the step of entering a corrective action into the database, which was taken to prevent generating an event to improve statistical process control of machines and plants to improve quality and optimize productivity (pg. 1, par. [0003] and [0008]).

15. As per claim 11, McCormick teaches as set forth above the step of generating at least one report based on the product specific data stored in the at least one database (col. 9, lines 26-44; i.e. generating report with information retrieved from the MDR database).

16. As per claim 12, McCormick teaches a method of monitoring at least one manufacturing process for at least one manufacturing plant, the method comprising the steps of:

automatically collecting first product specific data (Fig. 3, element 306; i.e. product characteristics that is a measurable aspect or attribute of a product) from the at least one manufacturing process (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21; i.e. collecting product data from the manufacturing processing operation at predetermined time intervals in MDR database (Fig. 3, element 108)); and

storing the product identifying data (Fig. 3, element 306), the plant specific data (Fig. 3, element 304) and the first product specific data (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21) in at least one database (col. 6, lines 63-67, col. 7, lines 1-10 and 19-21 and col. 9, lines 55-67), wherein the first product specific data is automatically collected and stored at regular time intervals (col. 6, lines 63-67 and col. 7, lines 1-3 and 19-21; i.e. collecting product data from the manufacturing processing operation at predetermined time intervals in MDR database);

setting at least one specification (col. 7, lines 17-19; i.e. a target value, a lower limit value and upper limit value of each characteristic) for the first product specific data (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment based on the evaluation of a measured value of product data compared to limits of a user defined threshold);

indicating at least one alarm for the first product specific data (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment cell illustrates a bold "X" when a product is not fit for release based on based on the evaluation of a measured value of product data compared to the specification limits of a user defined threshold); and

comparing the first product specific data with the at least one specification (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment for a product provides a comparison of an estimate of the portion of the current production that falls outside of the limits to a user defined threshold) and notifying at least one user in real time when the product specific data triggers the at least one specification (col. 5, lines 53-63; i.e. the user station (Fig. 1A, element 106) notifies the user in real-time of the process performance via the screen shot of Fig. 6).

McCormick does not expressly teach entering product identifying data for at least one product into a first data entry field; entering manufacturing plant specific data into a second data entry field; assigning at least one data collecting apparatus to at least one manufacturing sub-process that produces the at least one product; at least one collecting data apparatus; setting at least one alarm for the first product specific data; and storing the product identifying data, the plant specific data and the first product specific data together in at least one database.

Although, it would have been obvious to one having ordinary skill in the time the invention was made to store the product identifying data, the plant specific data and the first product specific data together in at least one database, since it has been held that forming in one piece an article which has been formerly formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

Cordova teaches to assigning at least one data collecting apparatus (col. 8, lines 12-15 and Fig. 6, element 611; sensors are provided to sense and report process, product and equipment parameter data) to at least one manufacturing sub-process that produces the at least one product (col. 2, lines 30-33, col. 3, lines 22-24, col. 18, lines 48-52 and Fig. 1 and 2; i.e. sub-process steps in semiconductor production).

Cordova does not expressly teach to entering product identifying data for at least one product into a first data entry field; entering manufacturing plant specific data into a second data entry field; and setting at least one alarm for the first specific data.

Markham teaches to entering product identifying data for at least one product into a first data entry field (pg. 17, par. [0178] and [0183]; i.e. view and edit setpoints or settings in a table); entering manufacturing plant specific data into a second data entry field (pg. 17, par. [0178] and [0179]; i.e. view and edit regulatory data with

respect to a sector, business unit or division of a plant in a table); and setting at least one alarm (pg. 5, par. [0058] and pg. 6, par. [0064])

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick to include assigning at least one data collecting apparatus to at least one manufacturing sub-process that produces the at least one product to provide improvement in data acquisition, process control, quality, yield and cost reduction in manufacturing systems (Cordova: col. 5, lines 30-34); and entering product identifying data for at least one product into a first data entry field; entering manufacturing plant specific data into a second data entry field; and setting at least one alarm for the first specific data to improve statistical process control of machines and plants to improve quality and optimize productivity (Markham: pg. 1, par. [0003] and [0008]).

17. As per claim 13, McCormick nor Cordova expressly teach the step of manually collecting second product specific data from the at least one product and entering the data in the same at least one database that stores the product identifying data, the plant specific data and the first product specific data.

Markham teaches to manually collecting (pgs. 9, par. [0119]; i.e. the users input supplemental information with respect to an event) and storing at least one piece of second product specific data in the same at least one database that stores a plurality of

data (pg. 8, par. [0096] and pg. 9, par. [0117]; i.e. the database can store different information with respect to one or more products, "For example, an incident of waste on a machine (e.g. the culling of one ore more products) by a waste code associated with a description field...").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCormick in view of Cordova to include manually collecting and storing at least one piece of second product specific data in the same at least one database that stores a plurality of data to improve statistical process control of machines and plants to improve quality and optimize productivity (pg. 1, par. [0003] and [0008]).

18. As per claim 14, McCormick teaches as set forth above the step of setting the at least one specification comprises the step of setting at least one range of specifications for the first product specific data (col. 7, lines 17-19; i.e. a lower limit value and upper limit value of measure for each characteristic).

19. As per claim 16, McCormick teaches as set forth above the step of setting the at least one alarm comprises the step of setting at least one range of alarms (col. 11, lines 36-48 and Fig. 6, element 610; i.e. the "Fit-for-Release" assessment cell illustrates a bold "X" when a product is not fit for release based on the evaluation of a measured

value of product data compared to the specification limits of a user defined threshold).

20. As per claim 18, McCormick teaches as set forth above the step of generating at least one report from the product identifying data, the plant specific data, the automatically collected first product specific data, and the second product specific data stored in the same at least one database (col. 9, lines 26-44; i.e. generating report with information retrieved from the MDR database).

21. As per claim 19, McCormick teaches as set forth above the step of enabling at least one user to access the at least one database in order to track the at least one product through at least one step of the at least one manufacturing sub-process (col. 3, lines 59-61, col. 4, lines 42-49 and col. 5, lines 19-26; i.e. data can be accessed on the MDR database via the Fig. 1, element 110).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to a manufacturing system.

U.S. Patent No. 2008/0066019 A1 discloses a data collection and viewing application associated with a batch process control system used within a process plant provides a user interface that allows a user to quickly and easily examine a particular batch process or a batch run, to compare separate batch runs and/or to determine whether the particular batch run deviates from a norm, without having to perform a lot of manual data manipulation.

WIPO Publication No. WO 01/69421 A2 discloses a computer-based system and method for managing key process indicators.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Norton whose telephone number is (571)272-3694. The examiner can normally be reached on Monday-Friday between 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer L. Norton/
Patent Examiner
Art Unit 2121